

Amendment of the claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1. (original) A process for extending the lifespan of a metazoan or metazoan cells comprising administering to said metazoan a composition comprising a C₆₀ compound having x pairs of adjacent carbon atoms bonded to two carbons of said C₆₀ compound wherein said adjacent carbon atom is further bonded to two groups of a general formula -COOH and -R, wherein R is independently selected from the group consisting of -COOH and -H, and wherein x is at least 1.
2. (original) The process of claim 1 where x is 4.
3. (original) The process of claim 2 wherein said composition comprises said C₆₀ compound, its pharmaceutically acceptable salts and pharmaceutically accepted esters, and a pharmaceutically acceptable carrier, present in said composition in a therapeutically effective amount.
4. (original) The process of claim 1 wherein x is 3.
5. (original) The process of claim 4 wherein said C₆₀ compound is C₃ tris malonic acid C₆₀.
6. (original) The process of claim 1 wherein said C₆₀ compound is administered intravenously, intramuscularly, subcutaneously or orally.
7. (original) The process of claim 6 wherein said C₆₀ compound is administered intravenously, intramuscularly or subcutaneously in an amount of at least 0.1 mg/kg.
8. (original) The process of claim 7 wherein said C₆₀ compound is administered intravenously, intramuscularly or subcutaneously in an amount of about 3 mg/kg.

9. (original) The process of claim 6 wherein said C₆₀ compound is administered orally in an amount of at least 0.1 mg/kg.

10. (original) The process of claim 6 wherein said C₆₀ compound is administered orally in an amount of about 15 mg/kg.

11. (original) The process of claim 7 wherein said C₆₀ compound is administered daily.

12. (original) The process of claim 9 wherein said C₆₀ compound is administered daily.

13. (original) The process of claim 1 wherein said metazoan is a vertebrate.

14. (original) The process of claim 1 wherein said metazoan is a mammal.

15. (original) The process of claim 1 wherein said metazoan is a human.

16. (original) A process for extending a metazoan's lifespan comprising regularly administering a superoxide dismutase-mimetic to said metazoan wherein said metazoan's lifespan is extended.

17. (original) The process of claim 16 wherein said superoxide dismutase-mimetic comprises a non-metallic compound.

18. (original) The process of claim 17 wherein said superoxide dismutase-mimetic comprises a carboxyfullerene.

19. (original) The process of claim 18 wherein said carboxyfullerene comprises a C₆₀ compound having x pairs of adjacent carbon atoms bonded to two carbons of said C₆₀ compound wherein said adjacent carbon atom is further bonded to two groups of a general formula -COOH and -R, wherein R is independently selected from the group consisting of -COOH and -H, and wherein x is at least 1.

20. (original) The process of claim 19 wherein x is about 4.

21. (original) The process of claim 19 wherein x is 3.
22. (original) The process of claim 21 wherein said C₆₀ compound is C₃ tris malonic acid C₆₀.
23. (original) The process of claim 18 wherein said carboxyfullerene is administered intravenously, intramuscularly, subcutaneously or orally.
24. (original) The process of claim 23 wherein said carboxyfullerene is administered intravenously, intramuscularly or subcutaneously in an amount of at least 0.1 mg/kg.
25. (original) The process of claim 24 wherein said carboxyfullerene is administered intravenously, intramuscularly or subcutaneously in an amount of about 3 mg/kg.
26. (original) The process of claim 18 wherein said carboxyfullerene is administered orally in an amount at least 0.1 mg/kg.
27. (original) The process of claim 26 wherein said carboxyfullerene is administered orally in an amount of about 15 mg/kg.
28. (original) The process of claim 24 wherein said compound is administered daily.
29. (original) The process of claim 26 wherein said compound is administered daily.
30. (original) The process of claim 16 wherein said metazoan is a human.
31. (original) A process for extending a metazoan's lifespan comprising regularly administering an antioxidant compound to said metazoan, wherein said compound is introduced into said metazoan intravenously, intramuscularly, subcutaneously or through oral delivery.
32. (original) The process of claim 31 wherein said compound comprises a C₆₀ compound having x pairs of adjacent carbon atoms bonded to two carbons of said C₆₀ compound wherein said adjacent carbon atom is further bonded to two groups of a general formula -COOH and -R, wherein R is independently selected from the group consisting of -COOH and -H, and wherein x is at least 1.

- 33-55. (canceled).
56. (original) A process for extending the lifespan of a human comprising administering to said human a composition comprising a C_{60} compound having x pairs of adjacent carbon atoms bonded to two carbons of said C_{60} compound wherein said adjacent carbon atom is further bonded to two groups of a general formula $-COOH$ and $-R$, wherein R is independently selected from the group consisting of $-COOH$ and $-H$, and wherein x is at least 1.
57. (original) The process of claim 56 where x is about 4.
58. (original) The process of claim 56 wherein said composition comprises said C_{60} compound, its pharmaceutically acceptable salts and pharmaceutically accepted esters, and a pharmaceutically acceptable carrier, present in said composition in a therapeutically effective amount.
59. (original) The process of claim 56 wherein x is 3.
60. (original) The process of claim 59 wherein said C_{60} compound is C_3 tris malonic acid C_{60} .
61. (original) The process of claim 56 wherein said C_{60} compound is administered intravenously, intramuscularly, subcutaneously or orally.
62. (original) The process of claim 61 wherein said C_{60} compound is administered intravenously, intramuscularly or subcutaneously in an amount of at least 0.1 mg/kg.
63. (original) The process of claim 62 wherein said C_{60} compound is administered intravenously, intramuscularly or subcutaneously in an amount of about 3 mg/kg.
64. (original) The process of claim 61 wherein said C_{60} compound is administered orally in an amount of at least 0.1 mg/kg.
65. (original) The process of claim 64 wherein said C_{60} compound is administered orally in an amount of about 15 mg/kg.

66. (original) The process of claim 62 wherein said C₆₀ compound is administered daily.

67. (original) The process of claim 64 wherein said C₆₀ compound is administered daily.

68. (original) A process for extending a human's lifespan comprising regularly administering an antioxidant compound to said human, wherein said compound is introduced into said human intravenously, intramuscularly, subcutaneously or through oral delivery.

69. (original) The process of claim 68 wherein said compound comprises a C₆₀ compound having x pairs of adjacent carbon atoms bonded to two carbons of said C₆₀ compound wherein said adjacent carbon atom is further bonded to two groups of a general formula -COOH and -R, wherein R is independently selected from the group consisting of -COOH and -H, and wherein x is at least 1.